Joint Medical Logistics 2010: A Template for Change in Military Logistics

Abstract Introduction

This paper examines the implications of Joint Vision 2010 and its Focused Logistics component for the military's medical logistics community. The Joint Medical Logistics 2010 (JML 2010) concepts and programs described in the paper provide a twenty-first century platform for worldwide medical logistics support, based on commercial practices, increasingly sophisticated information systems and electronic commerce processes, and truly joint logistics organizations. JML 2010 also provides the first true integration of the military's peacetime medical logistics practices, which are based on commercial "Prime Vendor" contracts and extensive use of Electronic Data Interchange, with wartime and readiness planning processes. By leveraging commercial support for military readiness requirements, JML 2010 planners will decrease inventory requirements, improve distribution responsiveness, reduce strategic lift requirements, and improve materiel availability.

"The nature of modern warfare demands that we fight as a joint team. This was important yesterday, it is essential today, and it will be even more imperative tomorrow. Joint Vision 2010 provides an operationally-based template for the evolution of the Armed Forces for a challenging and uncertain future. It must become a benchmark for Service and Unified Command visions." -- General John Shalikashvili, CJCS, "Joint Vision 2010"

No functional area lends itself to jointness better than logistics, on which the success of all military activity hinges. Logistics support to joint forces must be responsive, flexible, and precise. This, in fact, is one of the principal tenets of the Joint Vision 2010 doctrine, which has developed concepts known collectively as "Focused Logistics" to guide military planners at all levels. Within military medicine, the medical logistics community is forging joint systems and processes, linked to state-of-the-art commercial practices and partners, to achieve Focused Logistics goals. To support joint medical operations, logisticians are now shaping an integrated supply chain which centers on information, logistics, and transportation technologies to provide rapid response, asset management, and tailored support and sustainment at tactical, operational, and strategic levels. This fusion will simultaneously link the medical community with the logistics systems of the military services while preserving and enhancing the unique aspects of medical logistics, particularly where relationships with the medical industry are needed to improve medical readiness. The creation of an "integrated data environment" to ensure the smooth, efficient interoperation of the military's globally distributed medical logistics system is at the heart of the changes taking place. Finally, the use of activitybased costing methods to support business process reengineering is a key to the development and implementation of those changes.

In this paper, we'll first provide an overview of the functional process changes being designed by the medical logistics community. Next, we'll examine the information systems challenges posed by the transition from the present to the future. Finally, we'll describe the economic models used to support decision making and change management in joint medical logistics.

JML 2010: An Overview

Today's medical logistics system operates at three levels: the tactical level, which supports in-theater CINC requirements; the operational level, which provides support at the level of the individual military services; and the strategic level, which provides the principal interface with the commercial sector. Links between these levels have always existed, but they have often been complicated by complex processes and systems that only partially interconnect. The emerging medical logistics business processes require a drastic simplification and streamlining of these interfaces, resulting in shorter lead times, more flexible responses, improved efficiency, and truly joint operations.

The JML 2010 initiative arose in response to the logistics challenges laid down in the Joint Vision 2010 and Focused Logistics strategic plans. Under the sponsorship of the Integrated Medical Logistics Group (IMLG), a tri-service medical logistics planning and coordination body, a series of conferences and planning meetings were undertaken to develop a vision for medical logistics in the joint military operations of the future. The resulting vision, titled "Joint Medical Logistics 2010", describes the doctrine, organizations, processes, and systems used to achieve Focused Logistics objectives for

medical support. JML 2010 and the 2010 Action Plan will be guiderails into the future of medical logistics.

JML 2010 seeks to integrate the three levels completely, so that requirements, plans, and battlefield situational awareness can flow rapidly throughout the combat service support structure. Moreover, the JML 2010 initiative will also eliminate service-specific overlaps or gaps which accomplish the same things differently at the tactical and operational levels. It will provide CINCs, Joint planners, and others with joint capabilities to determine logistics requirements, develop acquisition and transportation plans, and monitor the execution of military operations.

At the same time, JML 2010 points to the need for the development of new information tools to perform these joint functions, integrate the global medical logistics process, and completely integrate the many organizations involved worldwide.

JML 2010 is based on the principles of Focused Logistics -- jointness, increased use of advancing technologies, information superiority, and response times measured in hours or days versus weeks. As a comprehensive concept of operations, JML 2010 provides the basis for the first truly joint doctrine for medical logistics support operations and provides the first vision of integrated systems which span the entire spectrum of logistics support.

JML 2010 also offers a vision of the most substantial change in logistics support concepts in over fifty years. Today's logistics support concepts are rooted in World War II-era concepts of depot operations, assembly management, and item standardization. JML 2010 proposes dramatic improvement in logistics support by a full transition to commercial practices, full partnerships with commercial manufacturers, distributors, and information service providers, and the movement from "just-incase" stockpiling of materiel to "just-in-time" procurement and transportation methods.

To add reliability and security to these procurement methods, the medical community is developing specialized contracts with civilian suppliers – insurance policies, in a sense, which pay industry to guarantee the future availability of needed supplies, without the need for DoD or its suppliers to actually own and warehouse the supplies. This is possible because DoD, even in wartime, represents a relatively small requirement for an industry that supports the entire nation on a day-to-day basis. Military planners are finding that industry can, for the most part, support DoD's wartime requirements by simply agreeing to divert on demand a small part of its daily product flow. The contracts to obtain that agreement amount to a small fraction of the cost of actually buying the products for peacetime storage.

JML 2010 also mandates the full integration of medical supply systems with distribution and transportation systems. It completes the transformation of supply specialists and inventory management systems into logisticians and integrated logistics systems.

For JML 2010 to work, all segments of the logistics chain must work together as an integrated whole. Remembering that modern, high-velocity logistics substitutes information and distribution assets for actual inventory, it becomes apparent that organizations at all levels must achieve unprecedented integration. Information must

flow seamlessly, cohesively, and without interruptions.

This, in turn, implies a degree of commonality and interoperability in business processes, support concepts, and system integration. Work that used to take weeks to complete -- the generation and transmission of requirements from the organizational level to suppliers in the industry, or the handling and processing of materiel in transportation channels, or the reconciliation of receipts, accounting data, and invoice payment processes -- must now be completed in hours or even minutes. Because the logistics system is also streamlining and downsizing, this work must also take place for the most part without unnecessary manual processing. This mandates the use of information technology. telecommunications, and electronic commerce in ways that are just now beginning to be defined.

Organizational and cultural changes are also needed. The military services, working together and with the help of the Defense Logistics Agency, are now defining "business rules" for the distribution of materiel, the seamless sharing of information with each other, and the eventual development of jointly-staffed organizations to synthesize and integrate their operations. Eventually, the services hope to develop joint processes for the performance of common functions like requirements determination, standardization, procurement, and management of medical materiel. This degree of shared support will become the standard, not the exception. JML 2010 provides the first vision of an integrated, joint logistics support process that moves without interruption or organizational barriers from the industry all the way to the deployed customer. It

requires the formal merging of processes (and in some cases organizations) that have historically been operated in relative isolation from each other. Figure 1 illustrates this integration.

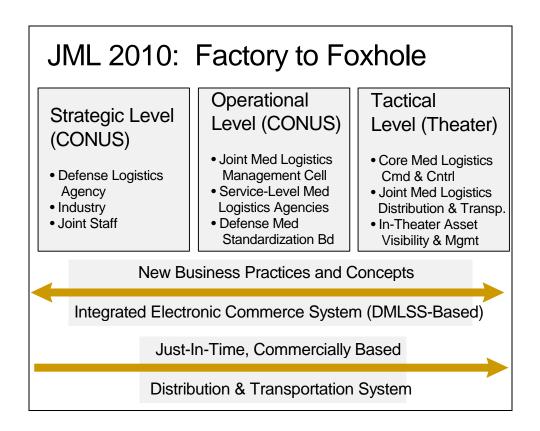


Figure 1. The JML 2010 Continuum.

The establishment of joint coordinating organizations at the theater level, in the form of a joint theater medical logistics management organization, and at the operational level, in the form of a jointly-staffed medical logistics management cell crosslinked with existing service-level logistics agencies, is key to achieving this. Also key is the development of a single medical logistics information system architecture which is integrated with the theater medical information, and the overall Global Combat Service Support (GCSS) system architectures. That single system, the

Defense Medical Logistics Standard Support (DMLSS) Program, represents the Department's key initiative to provide integrated automated information support for joint medical logistics at all levels. Finally, to achieve the close collaboration and integration with the commercial partners providing the vast majority of the materiel needed to support military operations, the military must use a commercially-based electronic commerce system for procurement, transportation, and payment management. Over time, this commercially based EC system will transition from one

focused primarily on transactions in the order fulfillment process to one which enables capabilities assessment, risk management, and other forms of supply chain collaboration.

Support to Military Operations in a Joint Theater

The JML 2010 vision also includes significant changes in intra-theater medical logistics functions, as indicated graphically in Figure 2. First, almost all theater medical logistics support is expected to be fully joint -- jointly staffed, operating joint information systems, and with joint command and control.

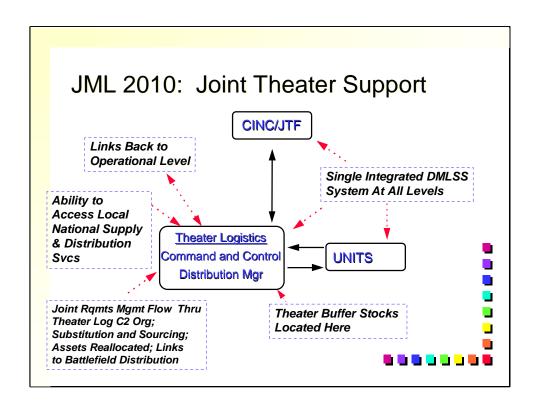


Figure 2. Joint Theater Support Concepts.

Next, greatly reduced in-theater stocks are expected. This is a function of the reduction of overall medical presence in a deployed theater, as well as the increased operational tempo, improved precision of distribution systems, and faster flow of information from the theater back to the CONUS (or OCONUS) support structure. Building automated links between medical logistics managers and the Theater Distribution System will improve the flow of materiel forward within a theater, and will result in

less over-ordering, stockpiling, and other undesirable activity.

Medical logisticians will manage the distribution activities for all medical materiel in theater, but they will not operate their own distribution system. Instead, they will monitor and adjust the flow of materiel through military systems (such as the Defense Transportation Network) and commercial distributors (such as Prime Vendors, third party logistics companies, and international shippers and freight expediters).

Finally, medical logisticians expect to procure a significant part of their requirements directly from foreign sources. To do this, DoD intends to develop the ability to procure significant amounts of medical materiel required directly from foreign based U.S. distributors or regional third party national suppliers is expected. This both shortens the lead time needed to obtain materiel and reduces the strategic and operational transportation requirements to support the theater. On the other hand, it requires the development of new contracting strategies and procurement vehicles which are not currently available to deployed U.S. forces.

Logistics Support at the Operational Level

Traditionally, joint operations have unfolded within the context of a single theater of operations. Beyond those boundaries, medical logistics support has flowed through the military services and their respective logistics field operating agencies, the U.S. Army Medical Materiel Agency, the Navy Medical Logistics Command, and the Air Force Medical Logistics Office.

JML 2010 sets the stage for unprecedented integration of these agencies in peacetime as well. Functions such as the deliberate planning cycle, requirements determination, and assembly management can be jointly executed among the field operating agencies. As a joint initiative, JML 2010 does not merge them or create a single "purple", or joint, organization. Instead, it insures that the systems and processes each agency uses are fully interoperable. In many cases, JML 2010 provides the forum in which joint

systems will be developed. For example, systems used to compute requirements and manage war reserve materiel will eventually migrate to a common, tri-service platform. This tri-service commonality is crucial at the operational level. Vendors, wholesale providers, joint planners, and CINCs all expect and require consolidated, uniform interactions. In the past, the services have in essence competed with each other for limited medical resources, creating undesirable confusion -- and in some cases poor logistical support to deployed organizations. The new joint approach will resolve that issue and increase efficiency and effectiveness at the unit level, where it can make the most difference.

Logistics Planning

Readiness processes at the service-level medical logistics agencies and the Defense Medical Standardization Board -- the operational level in the worldwide medical logistics system -- are the heart of the planning system used to predict and prepare for military operations. As such, they are the primary focus of the "Prepare Now" principle described in Joint Vision 2010, and are the beneficiaries of many of the process improvements developed during the JML 2010 workshops.

Today, the operational level activities are primarily used in peacetime planning, and play marginal roles in the execution of operations. The JML 2010 vision of the future is to develop operational-level processes that improve peacetime planning but that also provide much-needed functionality to help the operational level support war-fighting and other military activities. The duality of today's peace / war

distinctions should be replaced over time with a seamless system which operates equally well in both settings.

The core readiness processes at the operational level consist of four interrelated, cyclic sub-processes, as indicated in Figure 3. In an sense, the readiness process has no

beginning and no end, but is a continuously operated cycle of operations. To address the changes needed in that cycle and its subprocesses, we'll examine each of the four subprocesses.

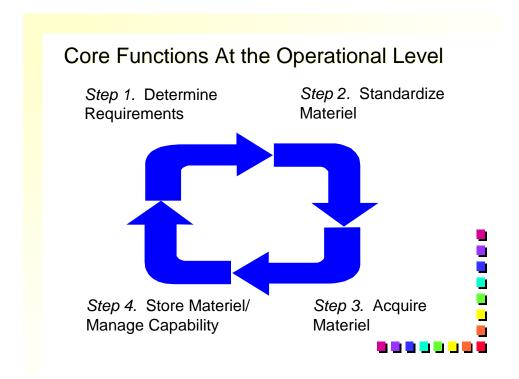


Figure 3. Core Readiness Functions at the Operational Level.

Determine Requirements

The process used to plan for the military's wartime needs is perhaps the most important function medical logisticians perform in peacetime. JML 2010 proposes a complete modernization of the process to determine requirements.

There has been general recognition that military medicine drives very few unique items of equipment or supply, but the processes for identifying and capitalizing on the capabilities of the vast U.S. healthcare market place have been inadequate. Under JML 2010, data about the products and equipment in regular, frequent use throughout the DoD health care system will be systematically gathered and used to shape requirements for wartime use. In general, the products clinicians use today are the ones they'll use in wartime -- so those products should be the ones DoD buys for its wartime hospitals and propositioning programs. To be sure, some wartime needs are unique, and the distribution of illness and injury among a combatant population is much different from peacetime patterns. But the basic tools of treatment -- surgical instruments, pharmaceuticals, and the like -- will remain largely alike. The shift here is from a requirements-based logistics system to a real-world capabilities-based system.

Medical technology evolves at an astonishing pace. For example, fifty percent of the pharmaceuticals sold in the U.S. today did not exist five years ago. In such an environment, programs to buy and store war reserve materiel are doomed to almost instant obsolescence, unless they are continually reviewed and modernized to insure that wartime plans are always derived from peacetime clinical usage.

For these and a variety of other reasons, requirements determination processes under JML 2010 will change in several ways:

- 1. It will be based on commercial item numbers and product descriptions rather than stock numbers and military specifications.
- 2. It will use real-world clinical usage as the starting point for wartime planning, rather than the more difficult to define wartime clinical practice.
- 3. Wherever possible, it will work to develop general functional statements of requirements rather than specific item descriptions, thereby permitting more local flexibility.
- 4. It will, wherever possible, defer the establishment of a procurement requirement until the actual deployment or military operation occurs.

Standardize Materiel

Standardization, the process used by DoD to select standard, universally-used products for clinical practice, has never been successfully applied to the vast majority of products used in military medicine. JML 2010 provides a radical new way of thinking about standardization. While none of these ideas are fully developed, they hold great potential for reducing the cost of readiness and improving materiel availability.

One strategy involves the use of economic analysis to drive standardization -- thus providing more readiness "bang for the buck" than is now possible. With more than

one million products in the medical marketplace, DoD could never hope to review all of them in its standardization process. Instead, it will study peacetime clinical practice and wartime needs to select only high-volume, high-cost products for standardization -- a process similar to that employed by the DoD Pharmacoeconomic Center for peacetime acquisition today. Applying this approach to all medical items used in DoD's peacetime system could simultaneous improve the quality and expense of readiness programs. This has been experimented with in the past, but has never been systematic or automated. Other strategies involve standardization of a minimal number of "core items" -- that small number of required products which are not readily available in the commercial sector, and which DoD therefore needs to acquire and store in anticipation of its readiness needs. Since most items needed in wartime can be readily procured in the necessary quantities directly from the private sector, DoD does not need to buy them until they are actually needed. Not buying these "noncore" products can save DoD a great deal of money, which can be applied to the huge shortfall in funding for the non-medical components of DoD's deployable medical units. Both of these ideas involve a dramatic reduction in the number and types of items to be standardized, and a dramatic improvement in the actual acquisition patterns that standardization should shape.

DoD is now developing implementation guidance for its emerging regional medical logistics support structure. The guidance calls for DoD's peacetime healthcare system to establish and operate regional offices to manage medical logistics throughout each of the Department's 12 TriCare regions. The functions of the regional offices will include analysis of regional procurement trends and

volumes, standardization of supply requirements within the region, and the development of regional contracts to gain better product pricing and vendor support through committed volume and pooled purchasing. The regional offices will link their data with readiness planning so that standardized products used in the TriCare regions will be the same (wherever possible) as those to be used in wartime.

A second recent initiative also bears mentioning. Since World War II, DoD has relied on its proprietary National Stock Number (NSN) as a means of identifying and cataloging product information. This system has grown increasingly complex, difficult to maintain, and inaccurate over time, and is now incapable of supporting DoD's needs. The recent emergence of commercial numbering systems with broad industry support provides an alternative, though. In the pharmaceutical marketplace, the National Drug Code (NDC) is widely accepted, easily implemented, and already linked to vast databases of drug information. For non-drug items, the recent development of an industrystandard Universal Product Number (UPN) offers the strong potential for national and international use of a single numbering convention for medical products. Because of the complexity of the NSN system and the hundreds of data elements linked to it in DoD's information systems, the transition from NSNs to NDCs / UPNs will be complex. It offers the first truly viable pathway to real integration between DoD and its commercial trading partners, though, which provides strong incentive to make the shift.

These initiatives are limited now to the medical commodity, but they may offer potential for other commodities, too. As DoD seeks more ways to shrink its logistics

infrastructure and improve links with the commercial sector, improvement of standardization and other core processes holds increasing promise.

Acquire Materiel

In the past, logistics planners were given product requirements from clinicians, who usually developed their recommendations with no direct knowledge of the kinds and quantities of products available from the U.S. healthcare system. Once requirements were known, logisticians attempted to buy and store all of the materiel needed. Under JML 2010, the military will buy and store only the materiel needed for the very first units to deploy. Other units, which will have more warning of their deployment needs, will keep on hand only those items not widely available from civilian suppliers.

To meet the deployment needs of military medical organizations, DoD will contract with some or all of its Prime Vendors and other suppliers to support "surge" requirements, or to provide "vendor managed inventory" at the time and place it's required. The process will focus on buying capability at a fraction of the cost of buying and maintaining perishable inventories. If an item is not available in the civilian sector at all, logisticians will coordinate with clinicians to find a substitute item or technology which is available.

The new acquisition practice is to favor off-the-shelf, civilian products, not "MIL SPEC" items or products that only DoD uses. The products found in JML 2010-era hospitals will be the ones that clinicians know and use in their daily practice. That way, the full potential of the vast U.S. healthcare system, which supports hundreds of millions of

people every day, can be brought to bear on military needs.

Store Materiel/Manage Capability

JML 2010 also offers new ways of thinking about medical assemblies -- the hospitals and treatment sets that form the core of the military's medical support structure. Aircraft and automotive designers now routinely design their products using computer-aided design tools which allow them much greater flexibility in the actual construction of their hardware. Applying these same tools to military medical logistics, it may be possible in the future to have databases representing "virtual hospitals", some or all of which won't actually be procured until the time of deployment. Deferring the need to buy and store medical assemblies has the potential for savings in the hundreds of millions of dollars over the next decade. More important, it makes possible for the first time the fielding of truly up-to-date technology in a theater of operations. Current processes, in which stillevolving technology is procured, stored, and becomes obsolete, will be replaced by justin-time processes to buy the most current technology only when it's needed for an actual military operation.

The most glaring deficiency in DoD's deployable medical units has always been their non-medical components -- trucks, generators, radios, shelters, and other needed equipment. Modernization of that part of the units can be accomplished in part by reducing the peacetime investment in medical components.

Of course, to have this kind of flexibility, current information systems will need to be completely modernized, and acquisition and procurement methods to access needed materiel "real time" will need to be developed. These systems and methods are not simple to develop and implement -- but they are important enough, and hold enough benefit, to justify the investment of time, money, and intelligence needed to accomplish them.

Process Reengineering and the Integrated Data Environment

Medical logistics organizations at the tactical, operational, and strategic level have operated and evolved over the last five decades with extensive horizontal linkages to each other -- information flows laterally between staff offices, divisions, and services -- but have become increasingly disconnected vertically, as illustrated in Figure 4. As business process changes, strategic vision, and mission shifts have taken the strategic plans increasingly into the new, just-in-time, commercially

dependent reality, the subordinate business processes and the legacy systems supporting them have failed to keep pace.

The increasing gap between the reality of Prime Vendor and other just-in-time practices and the readiness plans of the services means that risk is increasing unacceptably. The strategic planning process documents the long range vision of the various medical logistics organizations in the JML 2010 process. This "top down" vision is generally accepted by the stakeholders at all levels, but there is great difficulty in relating the high-level goals of the organizations to the detailed processes and systems they use on a day to day basis. In general business process improvement projects, process action teams, and information systems modernization programs have all been "bottoms up" efforts designed to effect grass-roots changes. Connecting the top down with the grass roots efforts is a key challenge facing the JML 2010 program.

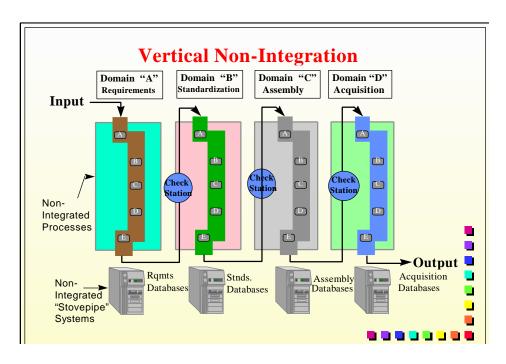


Figure 4. Non-Integrated Readiness Processes.

Vertical non-integration is not just a problem of linking long range goals and objectives with day to day processes. It also means that the day to day processes themselves grow increasingly fragmented and poorly integrated. This is because the principal purpose of long range plans is to integrate and synchronize the evolution and migration of existing business processes. Without that synchronization, existing processes are incrementally changed and added to, independent of any broader coordination, making them increasingly incompatible with each other.

In the case of the medical readiness processes being reengineered in the JML 2010 program, the lack of integration has led to increasing inefficiency as information is passed through organizations in support of individual processes. Instead of a smooth flow of information from the requirements process to the standardization process, for example, reports are manipulated, data is "crunched" in increasingly laborious programs, and skilled people are employed as data entry technicians, interpreters, or data translators. In this sense, JML 2010 is about reengineering the "white space" between processes as much as it is about reengineering the organizations and processes themselves.

Another feature of the non-integrated organization is that its systems become increasingly out of touch with the functions they're supposed to support. Computer code becomes ever more "brittle" due to the accumulated effect of years or even decades of maintenance, making further changes both risky and costly. Comprehensive modernization, even without major business process changes, becomes more and more expensive as system reengineering needs rise.

JML 2010 will take the information infrastructure of the medical logistics community and provide a template for its modernization. By providing a process-aligned template for system modernization, the program will insure the comprehensive upgrading needed to once again synchronize readiness needs with medical logistics business realities.

The medical logistics system in its broadest sense now runs more than a hundred legacy information systems, most of which are outdated, difficult to maintain, and lacking the capability to support modern business. Tools to permit easier intercommunication and interoperability, such as Electronic Commerce ability, open systems architecture, and standardized data structures, do not exist in these systems.

By focusing on the business processes supporting future medical logistics needs, JML 2010 provides a template against which an overall architecture for medical logistics and its supporting information system(s) can be developed. In keeping with those processes, future systems will be based on joint requirements, Common Operating Environment compliance, and full interoperability at and between the tactical, operational, and strategic levels. The future system will provide complete electronic commerce abilities to insure full integration with trading partners, total asset visibility for all users worldwide, and seamless integration of DMLSS applications now emerging from development.

As the critical enabler for all other business process changes in the JML 2010 initiative, information is not just important, it's indispensable. Designing and fielding the integrated medical logistics system of the future may be the single largest challenge this

initiative offers, but it also yields the highest payoff of all -- the success of the overall effort.

The Case for Change: Building a Functional Economic Analysis

Although the JML 2010 initiative could, by virtue of its title, sound like a very long-range, far distant goal, its real purpose is to make immediate, rapid change in medical logistics doctrine, organizations, and processes. To do that, a number of actions are now underway.

The first is the submission of draft joint doctrine for formal staff review and publication. Since doctrine is the foundation for force structure, resource allocation, training, and other processes, this step is particularly important. A second fundamental element is the development of information systems requirements for wartime medical logistics operations. This is already underway at the strategic and tactical levels, and will begin this calendar year for the operational level. Other efforts are also in process. The service-level logistics support agencies (in the case of medical logistics, these agencies are the U.S. Army Medical Materiel Agency; the Air Force Medical Logistics Office; the Navy Medical Logistics Command; the Fleet Hospital Program Office; and the Defense Medical Standardization Board) are now implementing a joint medical logistics management cell to coordinate interservice business rules and activities. In Haiti, a logistics "laboratory" is exploring improvements in quad-service medical logistics support. To expand asset visibility, a prototype Joint Medical Asset Repository has been developed and tested, and will soon be expanded. Together with the Joint Staff

and other joint planners, the JML 2010 group is also pushing forward with initiatives to establish improved transportation capability for wartime support.

While short-term changes are needed to gather momentum, garner early savings, and build consensus and enthusiasm for the program, the long range vision of a completely reengineered logistics readiness system is the truly important goal.

Within the context of two overarching principles -- the increase in jointness of medical logistics activities at all levels, and the need to create an integrated data environment (IDE) to link those joint activities -- the core processes at the heart of logistics readiness will be reengineered to take advantage of the cost and service breakthroughs at the heart of the new just-intime peacetime business practices.

But which of the potential pathways for reengineering should the community follow? The best way to answer that is to understand that all medical logistics support is essentially a contest between unlimited requirements and very limited resources. To insure that resources are expended as wisely as possible, the logistics leadership is using economic analysis tools to (a) show the true costs of the existing process and (b) predict the long-term economic outcomes of reengineered processes.

In other words, the logistics community is now building a "business case" for a potentially radical reengineering initiative. How much does it truly cost (including costs "hidden" in the budgets and staffing of other organizations) to provide today's type of logistics support? How much could be saved if new business practices from the

commercial and government sector were applied?

This technique, known as "Functional Economic Analysis", or FEA, uses accepted economic modeling practices, information tools, and statistical methods to develop a model that is the DoD standard for estimating costs and benefits. This means that when the FEA is completed (and assuming it can predict significant benefits from a reengineered process) it will have a clearly-reasoned, broadly accepted vision for change -- and the resources needed to effect it. For this reason, the FEA is the next logical step in the JML 2010 implementation process, and the one most likely to receive the high-level approval and funding needed to make the fundamental changes now under discussion.

Conclusions

The medical logistics community is firmly committed to true joint progress in implementing the JML 2010 vision. This vision is indeed the future of military medical logistics. JML 2010 will continue to develop its core concepts, capabilities, and organizational relationships over time. Many of the concepts related to the program are already working; others will continue to be developed and implemented.

The timelines for this project are of necessity ambitious. Logistics planners, realize that the pace of change in this area is not likely to abate, and the JML 2010 project will continue to evolve toward its full capability. Some of the major tasks involved in the project should be relatively quickly completed, such as the development of Joint doctrine for medical logistics. Other aspects will be completed but may require substantial

resources, such as the development and fielding of objective DMLSS capability to support joint, global operations. Still others will require careful, deliberate research and planning, such as the implementation of truly global international support contracts.

Modernizing business practices in DoD's peacetime healthcare system has saved hundreds of millions of dollars while improving the quality and amount of logistics support provided. It's too early to say with certainty how many of those benefits can be extended to the Department's deployed operations, but it appears that they are significant.

The JML 2010 community is now prototyping an economic analysis tool to model and predict the improvements available through business process reengineering. Those improvements will serve as a guidebeam for implementation of the JML 2010 vision.

The changes described in this briefing are not simple or superficial. They represent the reengineering of a medical logistics support structure that has been in operation for over fifty years. Moreover, there are inhibitors --politics, policy, constrained resources. But the JML 2010 concepts also represent the opportunity for military medical logisticians to take advantage of exciting new technologies, commercial business practices, and economic benefits. It also offers the chance for medical logisticians to remain on the cutting edge of DoD policy and defense logistics.

In a sense, Joint Medical Logistics 2010 is not a future operational concept. Instead, it represents a rational, measured response to a changing world -- a world in which military budgets are declining, outsourcing and

privatization are routine coping strategies, and the U.S. healthcare system's commercial capabilities vastly outstrip the military's own resources. JML 2010 recognizes and institutionalizes new military principles -- jointness, focused logistics, and information superiority. Most of all, JML 2010 improves medical logistics support by reducing lead times and overhead costs while getting more capability for each dollar invested.

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